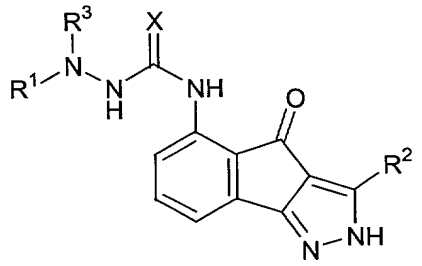
CLAIMS

What is claimed is:

1. A compound according to formula (I):



(I)

X is selected from O or S;

R^1 is selected from the groups: C_3-C_{10} membered carbocycle substituted with 0-5 R^4, and 3-10 membered heterocycle substituted with 0-5 R^5, provided that if R^1 is phenyl then R^1 is substituted with 1-5 R^4;

R^2 is selected from the groups: H, C_{1-10} alkyl substituted with 0-3 R^6, C_{2-10} alkenyl substituted with 0-3 R^6, C_{2-10} alkynyl substituted with 0-3 R^6, -$(CF_2)_mCF_3$, C_{3-10} membered carbocycle substituted with 0-5 R^4, and 3-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S and substituted with 0-5 R^5;

R^3 is selected from the groups: H, C_{1-4} alkyl, C_{3-6} cycloalkyl, or C_{4-10} cycloalkylalkyl;

R^4 is independently selected from the groups: halo, -CN, NO_2, C_{1-4} alkyl, C_{1-4} haloalkyl, NR^7R^{7a}, =O, OR^7, COR^7, CO_2R^7, $CONR^7R^{7a}$, $NHC(O)NR^7R^{7a}$, $NHC(S)NR^7R^{7a}$, $NR^7C(O)OR^{7b}$, $NR^7C(O)R^{7b}$, $SO_2NR^7R^{7a}$, SO_2R^{7b}, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S;

alternatively, when two R^4's are present on adjacent carbon atoms they combine to form $-OCH_2O-$ or $-OCH_2CH_2O-$;

R^5 is independently selected from the groups: halo, -CN, NO_2, C_{1-4} alkyl, C_{1-4} haloalkyl, NR^7R^{7a}, $NR^7C(O)OR^{7b}$, $NR^7C(O)R^{7b}$, OR^7, COR^7, CO_2R^7, $CONR^7R^{7a}$, $CON(R^9)[(CH_2)_mR^{10}]$, $CO(CH_2)_mR^{10}$, $NHC(O)NR^7R^{7a}$, $NHC(S)NR^7R^{7a}$, $SO_2NR^7R^{7a}$, and SO_2R^{7b};

R^6 is independently selected from the groups: halo, -CN, NO_2, C_{1-4} alkyl, C_{1-4} haloalkyl, NR^7R^{7a}, $NR^8NR^8R^{8a}$, $NR^7C(O)OR^7$, $NR^7C(O)R^{7b}$, =O, OR^7, COR^7, CO_2R^7, $CONR^7R^{7a}$, $NHC(O)NR^7R^{7a}$, $NHC(S)NR^7R^{7a}$, $SO_2N^7R^{7a}$, SO_2R^{7b}, C_{3-10} membered carbocycle substituted with 0-5 R^4, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S, substituted with 0-3 R^7;

R^7 is independently selected from the groups: H, halo, -CN, NO_2, C_{1-4} haloalkyl, $R^8R^{8a}N(CR^9R^{9a})m$, $NR^8NR^8R^{8a}$, $NR^8C(O)OR^8$, $NR^8C(O)R^8$, =O, $R^8O(CR^9R^{9a})m$, COR^8, CO_2R^8, $CONR^8R^{8a}$, $NHC(O)NR^8R^{8a}$, $NHC(S)NR^8R^{8a}$, $SO_2NR^8R^{8a}$, SO_2R^{8b}, C_{1-4}alkyl, C_{3-6}cycloalkyl, C_{4-10}cycloalkylalkyl, phenyl, and benzyl;

R^{7a} is independently selected from the groups: H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, phenyl, and benzyl;

alternatively, R^7 and R^{7a}, together with the atoms to which they are attached, form a heterocycle having 4-8 atoms in the ring and containing an additional 0-1 N, S, or O atom and substituted with 0-3 R^{7c};

R^{7b} is independently selected from the groups: H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, phenyl, and benzyl;

R^{7c} is independently selected from the groups: halo, -CN, N_3, NO_2, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, C_{1-4} haloalkyl, NR^7R^{7b}, $R^8R^{8a}N(CR^9R^{9a})m$, =O, OR^7, $R^8O(CR^9R^{9a})m$, COR^7, CO_2R^7, $CONR^7R^{7b}$, $NHC(O)NR^7R^{7b}$, $NHC(S)NR^7R^{7b}$, $NR^7C(O)OR^{7b}$, $NR^7C(O)R^{7b}$, $C(=NR^8)R^{8a}$, $C(=NR^8)NR^{8a}R^{8b}$, $SO_2NR^7R^{7b}$, SO_2R^{7b}, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S;

R^8 is independently selected from the groups: H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, phenyl and benzyl;

R^{8a} is independently selected from the groups: H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, phenyl and benzyl;

alternatively, R^8 and R^{8a}, together with the atoms to which they are attached, form a heterocycle having 4-8 atoms in the ring and containing an additional 0-1 N, S, or O atom;

R^{8b} is independently selected from the groups: H, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, phenyl and benzyl;

R^9 is idependently selected from the groups: H, C_{1-4} alkyl;

R^{9a} is independently selected from the groups: H, C_{1-4} alkyl;

R^{10} is independently selected from the groups: NR^7R^{7a}, C_{3-10} membered carbocycle substituted with 0-3 R^7, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S, substituted with 0-3 R^7; and

m is independently selected from 0, 1, 2, 3, and 4;

or a pharmaceutically acceptable salt thereof, a pharmaceutically acceptable prodrug form thereof, an N-oxide form thereof, or a stereoisomer thereof.

2. A compound according to claim 1, wherein:

X is O;

R^1 is selected from the groups: C_5-C_6 membered carbocycle substituted with 0-5 R^4, and 5-6 membered heterocycle substituted with 0-5 R^5.

3. A compound according to claim 1, wherein:

X is O;

R^1 is a C_5-C_6 membered carbocycle substituted with 0-5 R^4, wherein the carbocycle is an aryl,cycloalkyl, or cycloalkenyl group.

4. A compound according to claim 1, wherein:

X is O;

R^1 is phenyl substituted with 0-5 R^4.

5. A compound according to claim 1, wherein:
X is O;
R^1 is a C_5-C_6 membered cycloalkyl group substituted with 0-5 R^4, wherein the cycloalkyl is cyclohexyl, cyclopentyl.

6. A compound according to claim 1, wherein:
X is O;
R^1 is a C_5-C_6 membered cycloalkenyl group substituted with 0-5 R^4, wherein the cycloalkenyl group is cyclohexenyl, cyclopentenyl.

7. A compound according to claim 1, wherein:
X is O;
R^1 is a C_5-C_7 membered heterocycle substituted with 0-5 R^5, wherein the heterocycle is a heteroaryl,heterocyclenyl, or heterocyclyl group.

8. A compound according to claim 1, wherein:
X is O;
R^1 is a C_5-C_6 membered heteroaryl substituted with 0-5 R^5, wherein the heteroaryl is pyrazinyl, thienyl, isothiazolyl, oxazolyl, pyrazolyl, furazanyl, pyrrolyl, 1,2,4-thiadiazolyl, pyridazinyl, quinoxalinyl, phthalazinyl, imidazo[1,2-a]pyridine, imidazo[2,1-b]thiazolyl, benzofurazanyl, azaindolyl, benzimidazolyl, benzothienyl, thienopyridyl, thienopyrimidyl, pyrrolopyridyl, imidazopyridyl, benzoazaindole, 1,2,4-triazinyl, benzthiazolyl, furanyl, imidazolyl, indolyl, indolizinyl, isoxazolyl, isoquinolinyl,

isothiazolyl, oxadiazolyl, pyrazinyl, pyridazinyl, pyrazolyl, pyridyl, pyrimidinyl, pyrrolyl, quinazolinyl, quinolinyl, 1,3,4-thiadiazolyl, thiazolyl, thienyl or triazolyl.

9. A compound according to claim 1, wherein:
X is O;
R^1 is a C_5-C_6 membered heteroaryl substituted with 0-5 R^5, wherein the heteroaryl is pyrazinyl, pyridazinyl, pyridyl, pyrimidinyl, thiazolyl or thienyl.

10. A compound according to claim 1, wherein:
X is O;
R^1 is a C_5-C_6 membered heterocyclyl substituted with 0-5 R^5, wherein the heterocyclyl is tetrahydropyranyl, pyrrolidinyl, imidazolidinyl, pyrazolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, or piperazinyl.

11. A compound according to claim 1, wherein:
X is O;
R^1 is a C_5-C_6 membered heterocyclyl substituted with 0-5 R^5, wherein the heterocyclyl is tetrahydropyranyl or morpholinyl.

12. A compound according to claim 1, wherein:
X is O;
R^1 is a C_5-C_6 membered heterocyclenyl group substituted with 0-5 R^5, wherein the heterocyclenyl group is 1,2,3,4-tetrahydrohydropyridine, 1,2-dihydropyridyl, 1,4-dihydropyridyl, 1,2,3,6-tetrahydropyridine, 1,4,5,6-tetrahydropyrimidine, 2-pyrrolinyl, 3-pyrrolinyl, 2-

imidazolinyl, 2-pyrazolinyl, 3,4-dihydro-2*H*-pyran, or dihydrofuranyl.

13. A compound according to claim 1, wherein:
X is O;
R^3 is selected from the groups: H, C_{1-4} alkyl.

14. A compound according to claim 1, wherein:
X is O;
R^3 is methyl.

15. A compound according to claim 1, wherein:
X is O;
R^2 is a C_{3-10} membered carbocycle substituted with 0-5 R^4, or a 3-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S and substituted with 0-5 R^5.

16. A compound according to claim 1, wherein:
X is O;
R^2 is C_5-C_6 membered carbocycle substituted with 0-5 R^4, wherein the carbocycle is an aryl,cycloalkyl, or cycloalkenyl group.

17. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with 0-5 R^4.

18. A compound according to claim 1, wherein:
X is O;

R^2 is cycloalkyl substituted with 0-5 R^4, a C_5-C_6 membered cycloalkyl group substituted with 0-5 R^4, wherein the cycloalkyl is cyclohexyl, cyclopentyl.

19. A compound according to claim 1, wherein:
X is O;
R^2 is a C_5-C_6 membered cycloalkenyl group substituted with 0-5 R^4, wherein the cycloalkenyl group is cyclohexenyl, cyclopentenyl.

20. A compound according to claim 1, wherein:
X is O;
R^2 is a C_5-C_7 membered heterocycle substituted with 0-5 R^5, wherein the heterocycle is a heteroaryl,heterocyclenyl, or heterocyclyl group.

21. A compound according to claim 1, wherein:
X is O;
R^2 is a C_5-C_6 membered heteroaryl substituted with 0-5 R^5, wherein the heteroaryl is pyrazinyl, thienyl, isothiazolyl, oxazolyl, pyrazolyl, furazanyl, pyrrolyl, 1,2,4-thiadiazolyl, pyridazinyl, quinoxalinyl, phthalazinyl, imidazo[1,2-a]pyridine, imidazo[2,1-b]thiazolyl, benzofurazanyl, azaindolyl, benzimidazolyl, benzothienyl, thienopyridyl, thienopyrimidyl, pyrrolopyridyl, imidazopyridyl, benzoazaindole, 1,2,4-triazinyl, benzthiazolyl, furanyl, imidazolyl, indolyl, indolizinyl, isoxazolyl, isoquinolinyl, isothiazolyl, oxadiazolyl, pyrazinyl, pyridazinyl, pyrazolyl, pyridyl, pyrimidinyl, pyrrolyl, quinazolinyl,

quinolinyl, 1,3,4-thiadiazolyl, thiazolyl, thienyl or triazolyl.

22. A compound according to claim 1, wherein:
X is O;
R^2 is a C_5-C_6 membered heteroaryl substituted with 0-5 R^5, wherein the heteroaryl is pyrazinyl, pyridazinyl, pyridyl, pyrimidinyl, thiazolyl or thienyl.

23. A compound according to claim 1, wherein:
X is O;
R^2 is a C_5-C_6 membered heterocyclyl substituted with 0-5 R^5, wherein the heterocyclyl is tetrahydropyranyl, pyrrolidinyl, imidazolidinyl, pyrazolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, or piperazinyl.

24. A compound according to claim 1, wherein:
X is O;
R^2 is a C_5-C_6 membered heterocyclenyl group substituted with 0-5 R^5, wherein the heterocyclenyl group is 1,2,3,4-tetrahydrohydropyridine, 1,2-dihydropyridyl, 1,4-dihydropyridyl, 1,2,3,6-tetrahydropyridine, 1,4,5,6-tetrahydropyrimidine, 2-pyrrolinyl, 3-pyrrolinyl, 2-imidazolinyl, 2-pyrazolinyl, 3,4-dihydro-2*H*-pyran, or dihydrofuranyl.

25. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with 1-5 R^4.

26. A compound according to claim 1, wherein:

X is O;

R^2 is phenyl substituted with 1-4 R^4.

27. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with 1-3 R^4.

28. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with 1-2 R^4.

29. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with R^4;
R^4 is a 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S, wherein the heterocycle is a heteroaryl,heterocyclenyl, or heterocyclyl group.

30. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with R^4;
R^4 is a 5-6 membered heteroaryl containing from 1-4 heteroatoms selected from O, N, and S, which is substituted with 0-5 R^5.

31. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with R^4;
R^4 is NR^7R^{7a}.

32. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with R^4;
R^4 is NR^7R^{7a};
R^7 and R^{7a}, together with the atoms to which they are attached, form a heterocycle having 4-8 atoms in the ring and containing an additional 0-1 N, S, or O atom and substituted with 0-3 R^{7c}; and
R^{7c} is independently selected from the groups: halo, -CN, N_3, NO_2, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, C_{1-4} haloalkyl, NR^7R^{7b}, $R^8R^{8a}N(CR^9R^{9a})m$, =O, OR^7, $R^8O(CR^9R^{9a})m$, COR^7, CO_2R^7, $CONR^7R^{7b}$, $NHC(O)NR^7R^{7b}$, $NHC(S)NR^7R^{7b}$, $NR^7C(O)OR^{7b}$, $NR^7C(O)R^{7b}$, $C(=NR^8)R^{8a}$, $C(=NR^8)NR^{8a}R^{8b}$, $SO_2NR^7R^{7b}$, SO_2R^{7b}, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

33. A compound according to claim 1, wherein:
X is O;
R^2 is phenyl substituted with R^4;
R^4 is NR^7R^{7a};
R^7 and R^{7a}, together with the atoms to which they are attached, form a heterocycle having 6-7 atoms in the ring and containing an additional 0-1 N atoms and substituted with 0-3 R^{7c}; and
R^{7c} is independently selected from the groups: halo, -CN, N_3, NO_2, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, C_{1-4} haloalkyl, NR^7R^{7b}, $R^8R^{8a}N(CR^9R^{9a})m$,

=O, OR^7, $R^8O(CR^9R^{9a})m$, COR^7, CO_2R^7, $CONR^7R^{7b}$, $NHC(O)NR^7R^{7b}$, $NHC(S)NR^7R^{7b}$, $NR^7C(O)OR^{7b}$, $NR^7C(O)R^{7b}$, $C(=NR^8)R^{8a}$, $C(=NR^8)NR^{8a}R^{8b}$, $SO_2NR^7R^{7b}$, SO_2R^{7b}, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

34. A compound according to claim 1, wherein:

X is O;

R^2 is phenyl substituted with R^4;

R^4 is NR^7R^{7a};

R^7 and R^{7a}, together with the atoms to which they are attached, form a 6-7 membered heterocyclyl group or a 6-7 membered heterocyclenyl group, substituted with 0-3 R^{7c}; and

R^{7c} is independently selected from the groups: halo, -CN, N_3, NO_2, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, C_{1-4} haloalkyl, NR^7R^{7b}, $R^8R^{8a}N(CR^9R^{9a})m$, =O, OR^7, $R^8O(CR^9R^{9a})m$, COR^7, CO_2R^7, $CONR^7R^{7b}$, $NHC(O)NR^7R^{7b}$, $NHC(S)NR^7R^{7b}$, $NR^7C(O)OR^{7b}$, $NR^7C(O)R^{7b}$, $C(=NR^8)R^{8a}$, $C(=NR^8)NR^{8a}R^{8b}$, $SO_2NR^7R^{7b}$, SO_2R^{7b}, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

35. A compound according to claim 1, wherein:

X is O;

R^2 is phenyl substituted with R^4;

R^4 is NR^7R^{7a};

R^7 and R^{7a}, together with the atoms to which they are attached, form a 6-7 membered heterocyclyl group

substituted with 0-3 R^{7c}, wherein the heterocyclyl group is piperazinyl, or homopiperazinyl, and

R^{7c} is independently selected from the groups: halo, -CN, N_3, NO_2, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, C_{1-4} haloalkyl, NR^7R^{7b}, $R^8R^{8a}N(CR^9R^{9a})m$, =O, OR^7, $R^8O(CR^9R^{9a})m$, COR^7, CO_2R^7, $CONR^7R^{7b}$, $NHC(O)NR^7R^{7b}$, $NHC(S)NR^7R^{7b}$, $NR^7C(O)OR^{7b}$, $NR^7C(O)R^{7b}$, $C(=NR^8)R^{8a}$, $C(=NR^8)NR^{8a}R^{8b}$, $SO_2NR^7R^{7b}$, SO_2R^{7b}, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

36. A compound according to claim 1, wherein:

X is O;

R^2 is phenyl substituted with R^4;

R^4 is NR^7R^{7a};

R^7 and R^{7a}, together with the atoms to which they are attached, form a 6-7 membered heterocyclenyl group substituted with 0-3 R^{7c}, wherein the heterocyclenyl group is ,2,3,4- tetrahydrohydropyridine, 1,2-dihydropyridyl, 1,4-dihydropyridyl, 1,2,3,6-tetrahydropyridine, or 1,4,5,6-tetrahydropyrimidine; and

R^{7c} is independently selected from the groups: halo, -CN, N_3, NO_2, C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, C_{1-4} haloalkyl, NR^7R^{7b}, $R^8R^{8a}N(CR^9R^{9a})m$, =O, OR^7, $R^8O(CR^9R^{9a})m$, COR^7, CO_2R^7, $CONR^7R^{7b}$, $NHC(O)NR^7R^{7b}$, $NHC(S)NR^7R^{7b}$, $NR^7C(O)OR^{7b}$, $NR^7C(O)R^{7b}$, $C(=NR^8)R^{8a}$, $C(=NR^8)NR^{8a}R^{8b}$, $SO_2NR^7R^{7b}$, SO_2R^{7b}, and 5-10

membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

37. A compound according to claim 1, wherein:

R^{7c} is independently selected from the groups: C_{1-4} alkyl, C_{3-6} cycloalkyl, C_{4-10} cycloalkylalkyl, $NR^{7}R^{7b}$, and 5-10 membered heterocycle containing from 1-4 heteroatoms selected from O, N, and S.

38. A compound according to claim 1, wherein the compound is selected from:

3-(4-piperazinophenyl)-5-((N-methyl- N-(2-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl- N-(2-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-homopiperazinophenyl)-5-((N-methyl- N-(2-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylhomopiperazino)phenyl)-5-((N-methyl- N-(2-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(4-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(2-pyrazinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(2-pyrimidinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(2-thiazolyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(3-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl-N-(2-pyrazinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl-N-(2-thiazolyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl-N-(3-pyridinyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl- N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-ethylpiperazino)phenyl)-5-((N-methyl- N-(4-tetrahydropyranyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-isopropylpiperazino)phenyl)-5-((N-methyl- N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-piperazinophenyl)-5-((N-methyl-N-cyclohexylamino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylpiperazino)phenyl)-5-((N-methyl-N-cyclohexylamino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-ethylpiperazino)phenyl)-5-((N-methyl-N-cyclohexylamino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-isopropylpiperazino)phenyl)-5-((N-methyl-N-cyclohexylamino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-piperazinophenyl)-5-((N-methyl-N-(1-methylpiperidin-4-yl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-homopiperazinophenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

3-(4-(4-methylhomopiperazino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-ethylhomopiperazino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-isopropylhomopiperazino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-(N,N-dimethylamino)piperidino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-pyrrolidinopiperidino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(4-(4-piperidinopiperidino)phenyl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)-indeno[1,2-c]pyrazol-4-one;

3-(2,4-dimethylthiazol-5-yl)-5-((N-methyl-N-(4-tetrahydropyranyl)amino)carbamoylamino)indeno[1,2-c]pyrazol-4-one;

or pharmaceutically acceptable salt form thereof.

39. A pharmaceutical composition, comprising a pharmaceutically acceptable carrier, a compound according to claim 1 or a pharmaceutically acceptable salt or prodrug form thereof, and a cytostatic or cytotoxic agent.

40. A method of treating a cell proliferative disease associated with CDK activity in a patient in need thereof,comprising administrering to said patient a pharmaceutically effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof, wherein the proliferative diseases is selected from the group consisting of: Alzheimer's disease, viral infections, auto-immune diseases, fungal disease, cancer, psoriasis, vascular smooth cell proliferation associated with atherosclerosis, pulmonary fibrosis, arthritis glomerulonephritis, neurodegenerative disorders and post-surgical stenosis and restenosis.

41. A method of treating cancer associated with CDK activity in a patient in need thereof,comprising administrering to said patient a pharmaceutically effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof, wherein the cancer is selected from the group consisting of: carcinoma such as bladder, breast, colon, kidney, liver, lung, including small cell lung cancer, esophagus, gall-bladder, ovary, pancreas, stomach, cervix, thyroid, prostate, and skin, including squamous cell carcinoma; hematopoietic tumors of lymphoid lineage, including leukemia, acute lymphocytic leukemia, acute lymphoblastic leukemia, B-cell lymphoma, T-cell-lymphoma, Hodgkin's

lymphoma, non-Hodgkin's lymphoma, hairy cell lymphoma and Burkett's lymphoma; hematopoietic tumors of myeloid lineage, including acute and chronic myelogenous leukemias, myelodysplastic syndrome and promyelocytic leukemia; tumors of mesenchymal origin, including fibrosarcoma and rhabdomyosarcoma; tumors of the central and peripheral nervous system, including astrocytoma, neuroblastoma, glioma and schwannomas; other tumors, including melanoma, seminoma, teratocarcinoma, osteosarcoma, xenoderoma pigmentosum, keratoctanthoma, thyroid follicular cancer and Kaposi's sarcoma.

42. A method of treating a disease associated with apoptosis in a patient in need thereof, comprising administrering to said patient a pharmaceutically effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof, wherein the disease associated with apoptosis is selected from the group consisting of: cancer, viral infections, autoimmune diseases and neurodegenerative disorder.

43. A method of inhibiting tumor angiogenesis and metastasis in a patient in need thereof, comprising administrering to said patient a pharmaceutically effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

44. A method of modulating the level of cellular RNA and DNA synthesis in a patient in need thereof, comprising administering to said patient a CDK inhibitory effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

45. A method of treating viral infections in a patient in need thereof, comprising administering to said patient a CDK inhibitory effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof, wherein the viral infections is selected from the group consiting of HIV, human papilloma virus, herpesvirus, poxvirus, Epstein-Barr virus, Sindbis virus and adenovirus.

46. A method of chemopreventing cancer in a patient, comprising administering to said patient in need thereof, a CDK inhibitory effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

47. A method of inhibiting CDK activity comprising combining an effective amount of a compound according to claim 1, with a composition containing CDK.

48. A method of treating cancer associated with CDK activity in a patient in need thereof,comprising administrering to said patient a pharmaceutically effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof, in combination (administered together or sequentially) with known anti-cancer treatments such as radiation therapy or with cytostatic or cytotoxic agents, wherein such agents are selected from the group consisting of: DNA interactive agents, such as cisplatin or doxorubicin; topoisomerase II inhibitors, such as etoposide; topoisomerase I inhibitors such as CPT-11 or topotecan; tubulin interacting agents, such as paclitaxel, docetaxel or the epothilones; hormonal agents, such as tamoxifen;

thymidilate synthase inhibitors, such as 5-fluorouracil; and anti-metabolites, such as methoxtrexate.

49. A method treating cell proliferative diseases associated with CDK activity in a patient in need thereof, comprising administrering to said patient a pharmaceutically effective amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof, in combination (administered together or sequentially) with known anti-proliferating agents selected from the group consisting of:, altretamine, busulfan, chlorambucil, cyclophosphamide, ifosfamide, mechlorethamine, melphalan, thiotepa, cladribine, fluorouracil, floxuridine, gemcitabine, thioguanine, pentostatin, methotrexate, 6-mercaptopurine, cytarabine, carmustine, lomustine, streptozotocin, carboplatin, cisplatin, oxaliplatin, iproplatin, tetraplatin, lobaplatin, JM216, JM335, fludarabine, aminoglutethimide, flutamide, goserelin, leuprolide, megestrol acetate, cyproterone acetate, tamoxifen, anastrozole, bicalutamide, dexamethasone, diethylstilbestrol, prednisone, bleomycin, dactinomycin, daunorubicin, doxirubicin, idarubicin, mitoxantrone, losoxantrone, mitomycin-c, plicamycin, paclitaxel, docetaxel, CPT-11, epothilones , topotecan, irinotecan, 9-amino camptothecan, 9-nitro camptothecan, GS-211, etoposide, teniposide, vinblastine, vincristine, vinorelbine, procarbazine, asparaginase, pegaspargase, methoxtrexate, octreotide, estramustine, and hydroxyurea.

50. A method of inhibiting CDK1 activity, comprising adminsitering to a patient in need thereof an effective CDK1 inhibitory amount of a compound according to claim

1, or a pharmaceutically acceptable salt or prodrug form thereof.

51. A method of inhibiting CDK2 activity, comprising adminsitering to a patient in need thereof an effective CDK2 inhibitory amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

52. A method of inhibiting CDK3 activity, comprising adminsitering to a patient in need thereof an effective CDK3 inhibitory amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

53. A method of inhibiting CDK4 activity, comprising adminsitering to a patient in need thereof an effective CDK4 inhibitory amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

54. A method of inhibiting CDK5 activity, comprising adminsitering to a patient in need thereof an effective CDK5 inhibitory amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

55. A method of inhibiting CDK6 activity, comprising adminsitering to a patient in need thereof an effective CDK6 inhibitory amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

56. A method of inhibiting CDK7 activity, comprising adminsitering to a patient in need thereof an effective CDK7 inhibitory amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

57. A method of inhibiting CDK8 activity, comprising adminsitering to a patient in need thereof, an effective CDK8 inhibitory amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

58. A method of inhibiting CDK9 activity, comprising adminsitering to a patient in need thereof an effective CDK9 inhibitory amount of a compound according to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof.

59. A pharmaceutical kit for treating a cell proliferative disease associated with CDK activity, said kit comprising a plurality of separate containers, wherein at least one of said containers contains a compound accordig to claim 1, or a pharmaceutically acceptable salt or prodrug form thereof, and at least another of said containers contains one or more compounds selected from the group consisting of cytostatic or cytotoxic agents, such as for example, but not limited to, DNA interactive agents, such as carboplatin, cisplatin or doxorubicin; topoisomerase II inhibitors, such as etoposide; topoisomerase I inhibitors such as CPT-11 or topotecan; tubulin interacting agents, such as paclitaxel, taxane, docetaxel or the epothilones; hormonal agents, such as tamoxifen; thymidilate synthase

inhibitors, such as 5-fluorouracil; and anti-metabolites, such as methoxtrexate, and said containers optionally contain a pharmaceutical carrier, which kit may be effectively utilized for carrying out combination therapies according to the invention.